

**Commonwealth of Kentucky
Division for Air Quality**

PERMIT APPLICATION SUMMARY FORM

Completed by: Carolina Alonso

GENERAL INFORMATION:

Name:	Air Products and Chemicals, Inc.
Address:	412 North Main Street Calvert City, KY 42029
Date application received:	2/28/2007
SIC Code/SIC description:	2869, Industrial Organic Chemicals
Source ID:	21-157-00009
Source A.I. #:	2915
Activity ID:	APE20070001
Permit:	V-07-009

APPLICATION TYPE/PERMIT ACTIVITY:

<input checked="" type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
<input type="checkbox"/> Administrative	<input checked="" type="checkbox"/> Title V
<input type="checkbox"/> Minor	<input checked="" type="checkbox"/> Synthetic minor
<input type="checkbox"/> Significant	<input type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input checked="" type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:001, 1(116)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

EMISSIONS SUMMARY:

Pollutant	Actual (tpy)*	Potential (tpy)
PM/PM ₁₀	17.33	43.43
SO ₂	5.63	3.14
NO _x	167.39	361.68
CO	90.86	334.22
VOC	188.21	1357.04
Single HAPs > 10 tpy		
Vinyl Acetate Monomer	33.51	66.10
Hydrochloric Acid	2.77	15.70
Methanol	22.44	29.10
Source wide HAPs	63.92	121.75

* Actual emissions taken from the "2006 Emission Inventory Survey" (TEMPO).

SOURCE DESCRIPTION:

Air Products and Chemicals, Inc. (Air Products), Calvert City, is a chemical manufacturing plant. The source is a major source, as defined by 401 KAR 52:020 Title V Permits, for the potential emissions of over 100 tons per year of nitrogen oxides (NO_x), carbon monoxide (CO), and volatile organic compounds (VOC), the potential of a single hazardous air pollutant (HAP) greater than 10 tons per year, and the potential combined HAP emissions greater than 25 tons per year.

The source is also a major source, as defined by 401 KAR 51:017 Prevention of Significant Deterioration of Air Quality (PSD), for potential emissions of over 100 tons per year of NO_x, CO, and VOC.

For the purpose of Title V permitting, this facility is split into the following areas:

1. Vinyl Acetate Monomer (VAM) Storage
2. Acetylenics (Specialty Additives) Production Unit
3. Air Products Polymers (APP) Emulsions Production Unit
4. Plant Utilities
5. Cogeneration Plant

EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

In order to preclude applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality (PSD) for VOC, the source had elected to accept group emission limits in previous permits. These limits are reflected in Section D of the permit.

OPERATIONAL FLEXIBILITY:

None